

ABSTRACTS

Abstracts wetenschappelijke evidentie Wintermeeting 2026

Belgische Vereniging voor Gerontologie en Geriatrie

The impact of a transitional care model to prevent or optimize hospital admissions of nursing home residents: a prospective controlled pilot study

Gerontologie en Geriatrie, Departement Maatschappelijke Gezondheidszorg en Eerstelijnszorg, KU Leuven, Mieke Deschodt

Introduction: This pilot study evaluated the impact of a transitional care model on emergency department (ED) admission rates, hospital admission rates among nursing home (NH) residents, and the quality of care transitions.

Methods: A prospective controlled study was conducted in 20 NHs linked to a Belgian university hospital. Six NHs implemented the SHIFT model, which combined early detection (STOP AND WATCH), structured communication (ISBARR), a geriatric hotline, and standardized discharge planning. Registry data on ED and hospital admissions were collected across three periods: pre-intervention (July–September 2024), intervention (October–December 2024), and follow-up (January–March 2025). Interrupted time series analysis using mixed Poisson regression estimated changes in admission rates, adjusted for NH bed capacity.

Results: During the intervention period, 89 ED admissions were recorded (30 intervention, 59 control). ED admission rates declined more in the intervention group between pre-intervention and follow-up (–59.9%) compared to controls (–27.9%), with a ratio of ratios of 0.56 (95% CI: 0.31–1.00; $p = 0.051$). Hospitalization rates showed a similar trend but were not statistically significant. Process evaluation revealed significantly higher rates of advance care planning (96% vs. 65%) and pre-transfer communication (28% vs. 0%) in the intervention group.

Conclusion: The SHIFT model appears to reduce ED admissions and enhance transitional care processes. Although statistical significance was not achieved for all outcomes, trends suggest clinical relevance. Larger, randomized studies are needed to confirm effectiveness, assess sustainability, and evaluate cost-effectiveness.

BE-EMPOWERed: Implementatie en evaluatie van een multifactoriële valpreventie-interventie bij thuiswonende oudere personen

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Inleiding: Jaarlijks valt één op de drie thuiswonende 65-plussers minstens één keer. De complexiteit van vallen en de toenemende druk op zorgsystemen bemoeilijken de implementatie van effectieve valpreventie-interventies. Deze studie beschrijft de evaluatie van het BE-EMPOWERed programma, ontwikkeld om een evidence-based multifactoriële valpreventie-interventie duurzaam te implementeren in de Vlaamse thuissetting.

Methode: Het programma werd ontwikkeld via Intervention Mapping, in co-creatie met een eerstelijnszone in Vlaanderen. De evaluatie gebeurde via tweejarige mixed-methods studie in vier eerstelijnszones, met een 12 maanden voor- en name-ting. Uitkomsten omvatten het aantal vallers, fysieke activiteit (IPEQ), valpreventiegedrag (FaB), bezorgdheid om te vallen (FES-I) en fysieke functie (spierkracht, balans, mobiliteit) (SPPB). Kwalitatieve gegevens uit focusgroepen, zelfrapportages en observaties werden gebruikt voor de implementatie- en procesevaluatie.

Resultaten: Het BE-EMPOWERed programma omvat een zeven-weekse groep-sinterventie voor oudere personen, twee workshops voor zorgprofessionals en een implementatieplan ondersteund door opgeleide procesbegeleiders. In totaal werden 19 groepsprogramma's georganiseerd met 188 deelnemers (mediaan 78 jaar; IQR 74–83), met hoge opkomst (86–96%) en lage uitval (5%). Er werden significante verbeteringen gevonden in fysieke activiteit (+3.02 uur/week), valpreventiegedrag (+0.11 punten) en fysieke functie (effectgroottes 0.65–0.72; alle $p < 0.001$). De odds op vallen waren één jaar na de interventie lager (OR 0.16; 95% CI 0.08–0.32), overeenkomend met een daling van het aandeel vallers van 49% naar 21%. Fideliteits-evaluaties bevestigden een sterke naleving van de kernelementen, en de proces-evaluatie toonde een hoge haalbaarheid en acceptatie.

Besluit: BE-EMPOWERed biedt een effectief en implementeerbaar kader om valpreventie in de Vlaamse thuissetting te versterken.

Differences in Healthcare Provider Perceived Compassionate Care and Self-reported Well-being Across Five Acute Geriatric Units: the Importance of Interprofessional Mutual Respect and Open Reflection

Ghent University Hospital, Judith Hanssens

Background: Although evidence on the importance of compassionate care in health-care is growing, very little consideration in geriatrics literature exists.

Aim: Studying the variation and key components of compassionate care in acute geriatric units (AGUs).

Setting/Participants: A survey study in healthcare providers (HCP) of five Belgian AGUs using validated questionnaires: the Sinclair Compassion Questionnaire (SCQ), the Emotional Exhaustion subscale of the Maslach Burnout Inventory, and the Ethical Decision-Making Climate Questionnaire (EDMCQ).

Results: 118 team members participated (11% team leaders, 28% paramedics, 61% nursing professionals; response rate 70%). Mean SCQ scores of AGUs ranged from 3.62 to 4.28 (scale 1–5). Multivariate regression showed differences in SCQ scores between AGUs (estimate 0.084, $p=0.003$). Higher SCQ scores were associated with a better ethical climate (estimate 0.035 per EDMCQ point, $p<0.001$) but not with HCP characteristics (age, gender, professional role, employment percentage, emotional exhaustion) ($R^2=0.283$). Two EDMCQ domains (open interprofessional reflection and mutual respect) were linked to higher compassionate care, beyond the effect of AGU.

Emotional exhaustion was associated with professional role (estimate -3.004 , $p=0.011$), not with AGU ($p=0.269$) or ethical climate ($p=0.117$) ($R^2=0.115$). Nursing professionals had a higher risk of emotional exhaustion compared to paramedics (estimate 4.497 , $p=0.037$). Higher mutual respect scores were linked to lower emotional exhaustion beyond the effect of professional role.

Conclusions: The level of compassionate team performance varies across AGUs and is related to the ethical climate, not to HCP characteristics. Improving mutual respect and open interprofessional reflection appear promising to foster high-quality, patient-centred care in acute geriatrics.

From frailty criteria to functional profiles: evolving insights on intervention designs for older adults

Vrije Universiteit Brussel, Timothy Moreels

Introduction: Designing trials for older adults requires careful consideration of the multidimensional nature of ageing. A key challenge is the substantial heterogeneity within the population, even when applying standardized frailty criteria such as Fried's phenotype. Older adults who meet identical frailty criteria may still vary considerably across multifunctional domains, influencing intervention uptake, adherence, and effectiveness. Identifying distinct subgroups can help optimize trials targeting daily functioning.

Methods: We conducted an exploratory cluster analysis across six domains to characterize participant heterogeneity in the ActiveAge@Home study: health-related quality of life, self-management, activities of daily living, social wellbeing, physical performance, and cognition. Hierarchical clustering using Ward's method informed the number of clusters, k-means clustering identified final subgroups.

Results: Among 64 participants (80% female; mean age 84, range 70-98), we identified 4 clusters. Cluster 1 (n=16) represented a psychosocially well but cognitively weaker subgroup. Cluster 2 (n=15) showed a physically strong but socially vulnerable subgroup with high loneliness. Cluster 3 (n=21) comprised a resilient, high-functioning subgroup. Cluster 4 (n=12) represented an overall frail subgroup. The clusters captured substantial variance not reflected in their frailty classification.

Conclusion: Our findings underscore that frailty classifications alone fail to capture the multidimensional heterogeneity among older adults. The identified subgroups show meaningful differences in profiles that may shape intervention responsiveness. Recognizing these can improve trial design, intervention tailoring, and outcome choice to truly reflect functional priorities.

De Mondzorglijn: van beleid naar praktijk. Ervaringen van zorgverleners tijdens de implementatie van een mondzorgbeleid in woonzorgcentra in Vlaanderen

Vlaams Instituut Mondgezondheid - KU Leuven Population Studies in Oral Health, Ellen Palmers

Achtergrond: Mondgezondheid is een essentieel, maar vaak onderbelicht onderdeel van geriatrische zorg. Ontoereikende mondzorg verhoogt bij ouderen het risico op

onder meer pneumonie en hart- en vaataandoeningen. De Mondzorglijn¹ introduceert een preventief mondzorgbeleid via een zevenstappenplan en een multidisciplinair mondzorgteam in woonzorgcentra. Deelnemende woonzorgcentra krijgen een procesbegeleider toegewezen die hun gedurende 65 uur begeleidt en ondersteunt tijdens het implementatieproces. Deze studie beoordeelt de impact van de implementatie van dit mondzorgbeleid en de procesbegeleider op verschillende actoren binnen en buiten het woonzorgcentrum.

Methode: De impact wordt zowel kwantitatief als kwalitatief gemeten. Sinds 2019 schreven 160 woonzorgcentra zich in voor de Mondzorglijn. In 2025 hebben 35 organisaties het implementatietraject succesvol afgerond. Een gevalideerde vragenlijst werd afgenomen op drie meetmomenten (T0, T1, T2). De vragenlijst omvatte kennis-, attitude- en perceptievragen gericht op ervaringen rond mondzorg in de dagelijkse praktijk. Lineair mixed regression models identificeerden voorspellers van kennis- en attitudeverandering. Daarnaast werden semi-gestructureerde interviews uitgevoerd in 17 woonzorgcentra om de perceptie van zorgverleners, management en mondzorgteams te verkennen. Analyse van deze interviews wordt afgerond in februari 2026.

Resultaten: Kennis verbeterde significant over tijd ($p < 0.001$), terwijl de initieel hoge attitudes niet veranderden. Deel uitmaken van het mondzorgteam, functie en werkervaring waren belangrijke voorspellers. Organisaties die het traject voltooiden versterkten hun mondzorgstructuren substantieel (mondzorgbeleid: 58% – 100%; samenwerking met een tandarts: 52% – 87%). De kwalitatieve data suggereren dat deelnemende woonzorgcentra al grote stappen gezet hebben in het opstellen van een aankoopbeleid en zorg voor gebitsprotheses. Definitieve analyses volgen in 2026.

Conclusie: De Mondzorglijn heeft een positieve invloed op de mondzorgkennis en structuren binnen de organisatie. In een geriatrische context benadrukken voorlopige resultaten dat multidisciplinaire zorg en ondersteuning cruciaal zijn voor duurzame gedrags- en praktijkverandering.

1 Palmers EE, De Almeida Mello J, Janssens L, De Visschere L, Declerck D, Duyck J. Implementing an oral health policy in long-term care facilities for older adults in Flanders, Belgium: The Oral Health Care Track. *Gerodontology*. 2024 Mar;41(1):149–58.

Determinants of variation in ADL functioning in physically frail older adults: A regression analysis

UAntwerpen, Emma De Keyser

Background: Activities of Daily Living (ADL) are essential for independent living, yet substantial heterogeneity exists even among physically frail older adults. Identifying the key contributors to this variability is crucial for developing interventions that effectively support functional independence. Prior evidence suggests that physical, cognitive, psychosocial, and self-management domains may play a role, but their relative contribution remains unclear.

Methods: A cross-sectional analysis of baseline data from the ACTIVE-AGE@Home trial was conducted in community-dwelling, physically frail older adults ($n = 65$, 80% female, 70–98). ADL was assessed using the Belgian National Health Interview Survey scale. Univariate linear regressions examined associations between ADL and cognitive, psychosocial, physical, and health-related quality-of-life variables. Significant univariate predictors were entered into a stepwise multivariate regression model.

Results: Univariate analyses showed significant associations between ADL and global cognition, verbal learning, executive functioning, chair-stand performance, self-management abilities, and several SF-36 domains (adjusted $R^2 = 0.06$ – 0.13). In the stepwise model, self-management abilities explained 16.1% of the variance in ADL; adding global cognition increased explained variance to 22.2% (adjusted $R^2 = 0.195$; both $p < .05$). Multicollinearity was low ($VIF < 1.1$).

Discussion: Among the evaluated domains, self-management abilities and global cognition emerged as the strongest independent predictors of ADL functioning. These findings highlight the central role of cognitive and behavioural factors and support interventions that explicitly strengthen self-management and cognitive functioning in physically frail older adults.

Impact of Acute High- and Low-Intensity Resistance Training on BDNF Levels in Healthy Older Men

Vrije Universiteit Brussel, Orgesa Qipo

Background: Age-related declines in neuroplasticity may contribute to cognitive deterioration, partly mediated by reductions in circulating neurotrophic factors such as brain-derived neurotrophic factor (BDNF). Exercise is known to modulate BDNF, yet the acute neurobiological effect of different resistance training modalities in older adults remains unclear. This study examined the acute effects of blood flow

restriction training (BFRT) versus high-intensity resistance training (HIRT) on circulating BDNF in healthy older men.

Methods: Sixty-three inactive men aged 60–75 years were randomized into BFRT, HIRT, or control groups. Training consisted of 12 weeks of supervised lower-limb resistance exercise (2 sessions/week). Acute BDNF responses were assessed before and immediately after the first exercise session, while controls rested seated for 45 minutes. Blood lactate and rate of perceived exertion (RPE) were recorded. Between-group comparisons were performed using ANCOVA, and associations were tested using Spearman's rho.

Results: Although baseline BDNF did not differ among groups, a significant time $\times$ group interaction was observed ($p < 0.05$), indicating distinct BDNF responses. BFRT induced the largest acute increase in BDNF, whereas levels significantly decreased in the control group. Lactate increased significantly following BFRT and HIRT but not in controls, and changes in lactate were moderately correlated with Δ BDNF ($p = 0.435$, $p = .001$). Neither RPE nor post-exercise creatine kinase influenced BDNF responses.

Conclusion: Low-load BFRT elicits an acute increase in circulating BDNF comparable to high-intensity resistance training, and both responses appear linked to metabolic stress rather than muscle damage or perceived exertion. BFRT may therefore represent a feasible strategy to enhance neuroplasticity in older adults.

Rationing of Care and its Relationship with Staffing and Work Environment in Flemish Nursing Homes

KU Leuven, Departement Maatschappelijke Gezondheidszorg en Eerstelijnszorg, Onderzoekseenheid Gerontologie en Geriatrie, Lisa Geyskens

Objective: Rationing of care is the withholding of necessary care due to insufficient time, staffing, and/or skill mix. Evidence in nursing homes remains limited, hence, we aimed to describe levels of rationing of care and examine its relationship with staffing levels and work environment factors.

Methods: We used cross-sectional survey data from the Flanders Nursing Home project (FLANH), collected between February-July 2023. The sample included 901 nurses and care assistants from 25 nursing homes. The Basel Extent of Rationing of Nursing Care for Nursing Homes (BERNCA-NH) was used to assess how often, in the last seven workdays, care workers were unable to perform 20 care activities. Answer options included 'never', 'seldom', 'sometimes', and 'often'. We described the percentages of care workers reporting sometimes or often and applied linear mixed models adjusted for facility and care worker characteristics.

Results: Frequent rationing was observed for psychosocial care, including carrying out resident-requested activities (65.9%) and emotional support (41.8%). Care documentation (42.2%) and monitoring residents (37.4%) were also frequently rationed, while basic care like assisting with toileting (13.6%) and clinical care like wound care (13.0%) were less frequently rationed. Lower staffing levels were significantly associated with increased rationing only in univariate models, whereas lower perceived staffing adequacy, higher work pressure and a weaker person-centered vision were consistently linked to higher rationing in multivariate models.

Conclusion: Rationing is prevalent in nursing homes. Our findings highlight the importance of continuous investment in adequate staffing and a strong person-centered vision to safeguard care quality in nursing homes.

Verrijkende en verbindende interacties tussen zorgmedewerkers en personen met dementie in woonzorgcentra: een kwalitatieve studie naar beïnvloedende factoren

Arteveldehogeschool, Elise Cornelis

Inleiding: Persoonsgerichte zorg wordt beschouwd als de gouden standaard binnen dementiezorg, vooral in woonzorgcentra waar betekenisvolle interacties tussen zorgmedewerkers en bewoners essentieel zijn. Deze interacties ondersteunen niet alleen het welzijn en de levenskwaliteit van bewoners, maar versterken ook de arbeidstevredenheid van zorgverleners. Hoewel eerder onderzoek het belang ervan benadrukt, bestaat er nog beperkte empirische kennis over hoe zorgmedewerkers deze interacties vormgeven. Deze studie had tot doel de factoren te identificeren die de kwaliteit van interacties tussen zorgmedewerkers en bewoners met dementie beïnvloeden.

Methode: De kwalitatieve studie omvatte 15 participatieve observaties (106,35 uur) en 24 semigestructureerde diepte-interviews (26,1 uur) met zorgmedewerkers in zeven Vlaamse woonzorgcentra. Via thematische inhoudsanalyse werden factoren in kaart gebracht die interacties bevorderen of belemmeren.

Resultaten: Zorgmedewerkers ervaren hun interacties met bewoners doorgaans als waardevol, maar worden geconfronteerd met verschillende uitdagingen, waaronder hoge werkdruk, beperkte gespecialiseerde expertise en onvoldoende teamcommunicatie. Omgevingsfactoren zoals lawaai, emotionele onrust, onbeantwoorde persoonlijke noden en lichamelijk ongemak bemoeilijken deze interacties verder. Tegelijkertijd kwamen meerdere bevorderende strategieën naar voren, waaronder het hanteren van voorspelbare routines, empathisch handelen, het opbouwen van vertrouwen en het bieden van emotionele ondersteuning. Creatieve aanpassingen

in zorgpraktijken en een vertrouwde, ondersteunende omgeving bleken de kwaliteit van interacties te versterken.

Conclusie: De studie brengt cruciale factoren aan het licht die bijdragen aan verrijkende en verbindende interacties tussen zorgmedewerkers en personen met dementie. Ze benadrukt het belang van gerichte ondersteuning, voortdurende opleiding, sterke teamwerking en een stimulerende omgeving om kwaliteitsvolle dementiezorg te optimaliseren.

A multicomponent intervention consisting of exercise, proteins and omega-3 supplementation to improve sarcopenia in community-dwelling older adults: lessons learned from a 5-armed randomized controlled feasibility trial

KU Leuven, Nadja Amini

Background: Anabolic interventions, including physical exercise, proteins and omega-3 polyunsaturated fatty acids (PUFA) supplementation, have shown effectiveness in improving sarcopenia outcomes. However, data on their combined effects in older adults with sarcopenia remain limited. This study aimed to assess feasibility, acceptability, and preliminary effects of a multicomponent intervention combining individualized home-based exercise, proteins, and/or omega-3 supplementation (ENHANce 5-armed RCT).

Methods: Participants were community-dwelling older adults (≥ 65 years) diagnosed with sarcopenia (EWGSOP2-criteria). Feasibility was assessed via eligibility, recruitment, retention, and data completion rates. Acceptability was evaluated through participants' feedback, adherence, and safety. Effects were measured by changes in sarcopenia outcomes after 12 weeks.

Results: Fifty-eight participants (76.2 ± 6.6 years, $\sim 65.5\%$) with probable, confirmed or severe sarcopenia were included (Exercise, $n=9$; Protein, $n=12$; Exercise+Protein, $n=13$; Exercise+Protein+Omega-3, $n=12$; Control, $n=12$). Feasibility was low, with a recruitment rate of 2%. Acceptability was moderate, with most participants completing assessments and reporting positive experiences such as feeling stronger (34.5%) and more aware of physical activity and nutrition (22.4%). However, many found study procedures demanding (53.4%) and experienced difficulties with protein supplements (29.3%). Adherence varied widely across interventions. Safety was high, with no significant adverse effects reported. The Exercise group significantly improved in chair stand test (CST); Exercise+Protein in CST and Short Physical Performance Battery (SPPB); and Exercise+Protein+Omega-3 in CST, SPPB, and quadriceps strength.

Conclusion: A multicomponent intervention to treat sarcopenia showed low feasibility, moderate acceptability, and high safety. Preliminary efficacy results showed that exercise with protein supplementation may improve physical function. Adding omega-3 PUFA could offer further benefits for muscle strength and mass, however future large-scale trials are needed to confirm these findings.

Increased dietary fiber intake is associated with better grip strength and physical performance in community-dwelling older adults

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Backgrounds: Dietary fiber and fatty acids (FA) may modulate sarcopenia's pathophysiology, but evidence in older adults is scarce. We aimed to clarify associations between habitual fiber or FA intake and sarcopenia(-defining parameters) or inflammatory markers.

Methods: This retrospective, cross-sectional analysis included TEMPUS-FUGIT (NCT05008770) and ENHANCE (NCT03649698) data, assessing diet via 4-day food records in community-dwelling persons ≥ 65 years. Eighty-four persons with sarcopenia as per EWGSOP2-criteria and 100 controls without sarcopenia were included. Muscle mass and function were evaluated using ALM, HGS, CST, SPPB, and gait speed. Inflammatory markers WBC, IL-4,6 and 10, TNF- α , IFN- γ and fecal calprotectin (fCPT) were determined. Following multiple testing-adjusted correlations, multivariate linear regressions were conducted, correcting for age, sex, body mass index, steps, nutritional status and energy intake.

Results: Persons with sarcopenia consumed less total fat (68.11 g/day) than controls (77.7 g/day). Protein, docosahexanoic acid, soluble fiber and monounsaturated FA/saturated FA intake declined with increasing sarcopenia severity, whereas $\omega 6/\omega 3$ increased. HGS associated with protein (β : 0.264 [0.013;0.515]) and total fiber (β : 0.236 [0.077;0.395]). SPPB associated with total (β : 0.113 [0.006;0.220]) and soluble fiber (β : 0.093 [0.013;0.172]). PUFA (β : -0.133 [-0.244;-0.022]) and ω -6 intake (β : -0.115 [-0.214;-0.016]) associated with lower WBC. fCPT correlated inversely with total (p : -0.450) and soluble fiber (p : -0.436) in persons with sarcopenia. All results had a $p < 0.05$.

Conclusions: Higher fiber intake associated significantly with improved physical performance, HGS and decreased fCPT. Pioneering in investigation of fiber subtypes in a well-characterized older population, this research should be repeated in future

longitudinal and interventional trials to assess fiber as potential treatment option for sarcopenia.

Differences in Perceptions of Quality of Dying Scores during the Last Days of Life on Belgian Acute Geriatric Wards: An exploratory prospective observational study in Relatives, Nurses, and Doctors

Ghent University Hospital and Ghent University, Maïté Leleu

Introduction: This multicentre prospective observational study aimed to describe the evolution of pain and comfort during the last days of life in older people admitted to acute geriatric wards, comparing assessments by relatives, nurses, and doctors.

Methods: Relatives, nurses and doctors of patients with an expected death on two Belgian university hospitals completed the End-of-Life in Dementia-Comfort Assessment in Dying scale (EOLD-CAD, range 14-42) once per day. Pain scores were retrieved from medical charts. Linear mixed models assessed longitudinal evolutions and inter-rater correlations.

Results: After recognition of the last days of life, median time till death of 103 included patients was 39.6 hours. Nurses and doctors completed scales for 84 patients, and relatives for 42. Doctors scored higher on the EOLD-CAD scale compared to relatives (+3.4, $p=0.005$). EOLD-CAD-scores increased over time for relatives (+1.2 per 24h, $p=0.001$). Per 24 hours, doctors' and nurses' scores increased 0.7 ($p=0.09$) and 1.1 ($p=0.004$) less per 24 hours compared to relatives', respectively. Patient level correlations were weak, with highest correlation between nurses and doctors (maximum $r=0.25$, $p=0.005$). All correlations with relatives were low and non-significant. Before recognition of the last days of life, mean pain score was 2.2, which progressively diminished to less than 1.0 in the following 24 hours.

Conclusion: Quality of dying scores improved over time. Perceptions differ between relatives, nurses and doctors, particularly regarding dying symptoms. These results underscore the importance of timely and active communication to explore relatives' perspectives during the last days of life.

Quorum Sensing Peptides in Muscle Wasting: Insights from iAM373

Universiteit Gent, Liesbeth Crombez

Introduction: Sarcopenia is a prevalent and clinically important condition in older adults, yet there are few reliable circulating biomarkers and no widely effective

pharmacological treatments. Bacterial quorum sensing peptides (QSPs), small signaling peptides produced by bacteria, have recently been implicated in muscle wasting in experimental models. Their presence and relevance in humans, however, remains largely unexplored.

Methods: We studied 193 older adults (mean age 85). Plasma concentrations of five QSPs produced by gut and salivary microbiota, previously linked to muscle wasting in cellular or preclinical studies (iAM373, CSP-7, PlnA, LamD, and CSP-21) were measured using targeted LC-MS/MS. Concentrations below the limit of detection were handled using appropriate statistical methods for censored data. To better understand biological relevance, the most prevalent peptide (iAM373) was further evaluated in muscle cells (C2C12 myoblasts) for cellular uptake and effects on intracellular redox balance.

Results: All five QSPs were detectable in human plasma, with concentrations in the pico- to low nanomolar range. iAM373 was the most frequently detected peptide, present above the limit of detection in 12% of participants. In vitro experiments showed that iAM373 can penetrate muscle cells and significantly disrupt cellular redox homeostasis, indicating a direct intracellular effect relevant to muscle biology.

Conclusion: These findings provide evidence that multiple microbiota-derived quorum sensing peptides circulate in older adults. Among them, iAM373 appears most prevalent and biologically active in muscle cells. This peptide may represent a novel circulating biomarker and a potential mechanistic contributor to sarcopenia, warranting further clinical investigation.

Zorg voor ouderen: een kwalitatief onderzoek naar ervaringen van verpleegkundigen en zorgkundigen in diensten acute geriatrie en woonzorgcentra

UZ Gent, Alexandra Bergeman

Inleiding: De ouderenzorg in Vlaanderen staat onder grote druk door vergrijzing en personeelstekorten. Dit bemoeilijkt het behoud van verpleegkundigen en zorgkundigen, terwijl hun rol belangrijk is voor kwaliteit en continuïteit van zorg. Dit onderzoek beoogde inzicht te verwerven in hun ervaringen, motivaties en barrières om werkzaam te zijn en te blijven in de ouderenzorg.

Methode: Er werd een kwalitatief, fenomenologisch onderzoek uitgevoerd in 13 Vlaamse zorginstellingen (7 ziekenhuizen en 6 woonzorgcentra). In totaal namen 85 verpleegkundigen en zorgkundigen deel aan 16 semigestructureerde focusgroepen. De data werden auditief opgenomen, getranscribeerd en thematisch geanalyseerd volgens Braun en Clarke.

Resultaten: Werken in de ouderenzorg wordt ervaren als een voortdurende evenwichtsoefening. Zorgverleners beschrijven een dynamisch spanningsveld tussen positieve ervaringen, zoals affectieve zorg en interesse in levensverhalen, en uitdagende ervaringen, waaronder emotionele belasting en spanningen met familie. Deze dynamiek wordt gekarakteriseerd door de complexiteit van de ouderenzorg, waarin het individuele evenwicht van zorgverleners voortdurend verschuift. Dit evenwicht wordt beïnvloed door factoren op individueel, organisatorisch en maatschappelijk niveau. Zowel in woonzorgcentra als in acute geriatrie blijken organisatiecontext en maatschappelijke beeldvorming een belangrijke rol te spelen in de ervaren werkbareheid en motivatie.

Conclusie: Dit onderzoek benadrukt dat personeelsbehoud in de ouderenzorg niet enkel afhankelijk is van individuele motivatie, maar in belangrijke mate van structurele en organisatorische condities. Investeren in werkbare omstandigheden, erkenning en een realistischer beeld van de ouderenzorg is noodzakelijk om de sector aantrekkelijk te houden en de kwaliteit van zorg te garanderen.

Construct validity of vitality capacity and its relationships with key healthy ageing indicators, including locomotor capacity and quality of life, across midlife and older age

Vrije Universiteit Brussel, Francis Louter

Background: Vitality capacity (VC) reflects an individual's physiological state resulting from interactions between multiple physiological systems, including energy and metabolism, neuromuscular function, and immune and stress response functions. VC is considered a key domain of intrinsic capacity. However, it has largely remained a theoretical construct. This study aimed to empirically validate VC and examine its associations with locomotor capacity and quality of life (QoL).

Methods: Exploratory factor analysis (EFA) was conducted using pooled data from the Fatigue Resistance AMersfoort study (FRAME n=1000) and the Fatigue Plot study (FATPLOT n=620). Confirmatory factor analyses (CFA) were subsequently performed in two independent cohorts, the AMersfoort COhort study on functional decline, Healthy aging and Frailty (AMCOHF n=367) and the BrUssels sTudy on The Early pRedictors of FraiLty (BUTTERFLY n=491), to validate VC. Hierarchical linear regression analyses were used to investigate associations between VC, locomotor capacity, and QoL.

Results: EFA supported a one-factor model for VC, which was confirmed by CFA with good model fit in both cohorts. In BUTTERFLY the robust CFI was 0.960 and the SRMR was 0.040. In AMCOHF the robust CFI was 0.942 and the SRMR was 0.055.

The model identified maximal grip strength (GSmax), the 30-second chair stand test (30CST), the Multidimensional Fatigue Inventory (MFI-20), and the Capacity-to-Perceived Vitality physical ratio (CPV-physical) as indicators of VC. VC showed significant associations with locomotor capacity and QoL.

Conclusion: These findings support VC as a coherent domain and demonstrate its meaningful relationship with locomotor capacity and quality of life.

Real-World Evidence on In-Hospital Statin Use and Mortality in Geriatric Patients

UZ Gent, Inez Schets

Background: The role of statins in individuals older than 75 years, particularly those with multiple comorbidities and/or advanced frailty, remains unclear. Recent studies suggest potential geroprotective effects of chronic statin use in these populations, independent of cardiovascular status. However, the geroprotective effects of statins during acute hospitalisation in a geriatric population are unknown.

Objective: To examine the association between in-hospital statin exposure and in-hospital mortality among patients admitted to an acute geriatric ward using real-world data.

Methods: We conducted a retrospective observational cohort study of patients ≥ 75 years admitted to a geriatric ward between December 9, 2022 and July 24, 2023. Exposure was defined as statin administration on day 2 after admission. Patients were followed until death or discharge. The primary outcome was in-hospital all-cause mortality. Multivariable logistic regression models were adjusted for age, sex, comorbidity burden (Charlson Comorbidity Index), and frailty status at admission measured by handgrip strength. Sensitivity analyses included additional adjustment for, or stratification by, prior atherosclerotic cardiovascular disease (ASCVD) status and systemic inflammation assessed by C-reactive protein (CRP).

Results: Among 550 patients, continued statin use was associated with a 52% reduction in in-hospital mortality compared with non-use ($p=0.034$). Adjustment for ASCVD (51% lower odds; $p=0.047$) or systemic inflammation (45% lower odds; $p=0.094$) did not change the overall findings. Subgroup analyses by ASCVD status yielded comparable reductions in mortality in both secondary and primary prevention populations (54% and 50% lower odds, respectively). No significant interactions were observed between statin use and ASCVD status, CRP or frailty status at admission.

Conclusions: In-hospital statin exposure was associated with lower in-hospital mortality among acutely hospitalized older adults. These findings suggest that the

benefits of statin therapy may extend beyond chronic cardiovascular prevention. Prospective and randomized controlled studies are warranted to confirm these findings, assess causality and inform clinical practice.

Posters

The interplay between resilience and frailty in community-dwelling older adults: a systematic review

Vrije Universiteit Brussel (VUB), Svetlana Ermakova

Objectives: The global population is aging rapidly, creating new and complex public health challenges, like frailty. While traditional strategies have focused on reducing risk factors, resilience has been proposed as a potential protective factor against frailty. This review examines whether resilience and frailty are related and explores the nature and implications of this relationship.

Methods: A systematic search of PubMed, Web of Science, and PubPsych used keywords related to “older adults,” “resilience,” and “frailty.” Studies were included if they involved community-dwelling adults aged 60+ and explicitly assessed the resilience–frailty link.

Results: Ten quantitative and three qualitative studies were included. Considerable variation emerged in how resilience and frailty were conceptualized and measured. Eight studies reported a significant negative association between resilience and frailty, while two found no significant relationship. The relationship appeared unanimous and context influenced (e.g. some studies suggested a stronger protective effect of resilience in men, though findings varied culturally). Two longitudinal showed that declines in resilience predicted increased frailty, however the associations were nonlinear: the differential effects were observed in older adults with varying baseline frailty levels. Qualitative studies described resilience as a process shaped by life experiences, coping styles, and cultural background. Both notions were not seen as mutually exclusive — individuals could remain resilient while physically vulnerable.

Conclusion: Resilience generally emerged as a protective factor against frailty, though its expression and impact varied by context and measurement approach. Given its multifaceted nature, further longitudinal and interventional research is needed to clarify resilience’s role in healthy aging.

Long term evolution of functional status after robotic surgery in older patients with colorectal cancer: interim analysis of the Robo-G study

Vrije Universiteit Brussel, Jasmijn Peeters

Introduction: The main cornerstone for the treatment of non-metastatic colorectal cancer (CRC) is surgery. Older patients however are at higher risk for postoperative complications impacting their daily functioning and quality of life, which leads to their exclusion from a potential curative treatment. The Robo-G study investigates the long-term impact of robotic surgery in older patients with CRC on functional status (FS).

Methods: The present study is a prospective, observational study in older patients (≥ 70 year) with CRC, eligible for robotic surgery. FS was evaluated at baseline and after 3, 6 and 12 months by means of the following questionnaires and tests: Activities of Daily Living (ADL), Instrumental Activities of Daily Living (IADL), Timed Up and Go (TUG) and Hand Grip Strength (HGS).

Results: From 03/2023 till 09/2025, 60 patients were included in the study: median age 78 years, 80% with abnormal G8 screening). Baseline ADL, IADL, TUG and HGS were abnormal in respectively 28%, 37%, 14% and 92%. During follow-up FS remained stable or improved in the vast majority of patients (resp 90%, 73%, 89% and 85%). Only a minority of patients demonstrated a decline in FS without recuperation to baseline at 12 months (resp 7%, 13%, 7% and 7%).

Conclusion: Interim analysis of the Robo-G study demonstrates that robotic surgery in older patients with CRC does not impact functional status in most patients. In a minority of patients a FS decline was observed, most frequently for IADL, but this was reversible in most cases. Further inclusion and follow-up is ongoing.

GHOSTLY+: Targeting Muscle Strength Loss with an EMG-driven Serious Game and Blood Flow Restriction in Hospitalized Older Adults: a Hybrid Type 1 Randomized Controlled Trial Study Protocol

Rehabilitation Research Group, Vrije Universiteit Brussel, Margo Berlanger

Background: Hospitalization in older adults often leads to prolonged immobility, inducing rapid muscle loss and functional decline unrelated to their admission condition, this is known as hospital-associated disability (HAD). Dynamic exercises can prevent this, but many bedridden patients cannot perform them or are unmotivated to train during unsupervised time. To address this, we developed GHOSTLY+, an

electromyography-driven serious game combining isometric strength training with blood flow restriction. This study aims to evaluate the effectiveness of GHOSTLY+ in hospitalized older adults during unsupervised time and to identify determinants of its implementation across clinical settings.

Methods: This study is a hybrid type I effectiveness-implementation two-arm multicenter randomized controlled trial (n = 120). Both groups will receive conventional therapy, with the intervention group additionally using GHOSTLY+ for unsupervised quadriceps training. The primary effectiveness outcome is the maximal isometric quadriceps strength (MicroFET); secondary outcomes are muscle mass (ultrasound), functional performance, HAD, hospital stay and immobility duration, adherence and patient experience. Outcomes will be compared over time (baseline, week 1 and week 2) and between groups. The implementation outcomes will be evaluated through a mixed-methods approach that includes all end-users.

Results: Data collection will occur between January 2026 and December 2027.

Discussion: These data will indicate whether GHOSTLY+, in addition to standard care, can prevent muscle strength loss and related HAD, and will also describe the context for its implementation within in-hospital therapy.

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Personality Traits and Well-Being in Older Adulthood: A Systematic Review

Vrije Universiteit Brussel, Mahsa Kavian Pour

Introduction: Personality traits, as conceptualized in the Big Five model or the framework of agency and communion, are important contributors to well-being in adult life. This review examined how personality traits specifically relate to well-being in older adults.

Method: The review protocol followed the PROSPERO and PRISMA guidelines. A search was performed across PubMed, PsycInfo, PubPsych, and Web of Science using variations of the terms “aged,” “personality,” “subjective well-being,” and “psychological well-being.” Studies were eligible if they examined community-dwelling older adults with a mean age of ≥ 60 years, without chronic conditions, and operationalized personality through the Big Five or agency and communion traits.

Results: Overall, most studies showed a moderate risk of bias, and the predominance of cross-sectional designs. Nonetheless, the overall pattern demonstrates robust associations between personality traits and well-being in later life. Of the 22 included studies, 21 reported at least one significant association between personality

traits and well-being. Findings demonstrate consistent associations between certain personality traits (Neuroticism ($n = 18$), Extraversion ($n = 14$), Conscientiousness ($n = 12$)) and well-being in later life. Neuroticism consistently predicted lower well-being, whereas other personality traits generally demonstrated stable, positive associations across studies. Agency and communion did not show significant associations.

Conclusion: The findings suggest certain traits imply benefits for well-being (e.g., extraversion, conscientiousness), while others pose risks (particularly neuroticism), underscoring the need to understand how the positive and negative effects of different traits can be balanced. Future studies may investigate how interventions can mitigate the influence of maladaptive traits.

A Novel Multi-Task Fatigue Protocol: Development and Validation in Older Adults and Clinical Populations

Vrije Universiteit Brussel, Reinhard Claeys

Introduction: Fatigue is highly prevalent among older adults (OA) and stroke survivors, limiting daily functioning. In the WHO Healthy Ageing framework, fatigue is a key attribute of vitality capacity. Its multidimensional nature complicates objective assessment, and existing protocols lack ecological validity and fail to reflect the complexity of everyday tasks. This study aimed to develop and validate a standardized, lab-based protocol that reliably induces meaningful, activity-based fatigue.

Methods: A user-centred approach was used with OA (healthy, mobility-impaired, and sarcopenia) and stroke survivors. Focus group input informed task selection. In Phase 1, user testing assessed safety, realism, and task difficulty, and user input guided iterative protocol refinements. In Phase 2, the finalized protocol was validated to determine whether it reliably induced progressive fatigue within one hour. Participants completed the continuous course of demanding daily-life activities until (i) modified Borg >7 , (ii) voluntary stop, or (iii) one-hour duration.

Results: In Phase 1 ($n=15$) the protocol was found to be safe and ecologically relevant, and user feedback steered four iterative adjustments before the final protocol was established. In Phase 2 ($n=30$), the protocol met the predefined success criterion, with all participants showing a progressive increase in perceived exertion ($R^2=0.70-0.98$) within one hour.

Conclusion: This study presents the first ecologically grounded, multi-task protocol designed to standardize fatigue assessment. Its ability to elicit progressive fatigue will allow for the evaluation of fatigue-mitigating interventions, including lower-limb exoskeletons, and support research on vitality capacity and functional performance in ageing populations.

Effects of Resistance Training on Neuroplasticity Biomarkers in Adults with Chronic Inflammation: A Systematic Review and Meta-Analysis

Vrije University of Brussels, Vinod Kumar Karicheri

Introduction: Chronic inflammation in older adults is linked to accelerated cognitive decline and reduced neuroplasticity. One effective non-pharmacological method to control these effects is resistance training (RT). This systematic review and meta-analysis aims to synthesize evidence from randomized controlled trials (RCTs) investigating the impact of RT on circulating neuroplasticity biomarkers in adults with chronic inflammatory conditions.

Methods: Following PRISMA guidelines, we searched PubMed, Web of Science, and Embase for relevant RCTs. Two reviewers independently performed screening, data extraction, and risk of bias assessment using the Cochrane ROB 2 tool.

Results: Six RCTs ($n = 277$) were included, featuring populations with obesity, fibromyalgia, multiple sclerosis, and mild cognitive impairment risk. The meta-analysis showed a significant positive effect of RT on neuroplasticity biomarkers ($SMD = 3.41$, 95% CI [2.55, 4.28]). Additionally, RT altered myokines and decreased inflammatory markers (NF- κ B, IFN- γ). However, the very high heterogeneity ($I = 94.7\%$) and mixed study quality considerably reduce the certainty of these findings. Although increased IGF-1 was associated with faster cognitive processing, effects on individual biomarkers such as BDNF and IGF-1 were inconsistent.

Conclusion: RT effectively increased neuroplasticity biomarkers in adults with chronic inflammation. However, the exceptionally high heterogeneity across the studies limits firm conclusions. Further research is needed to clearly elucidate the long-term role of RT in preventing cognitive decline.

The impact of the SHIFT transmural care model on avoidable ED admissions in nursing home residents

Gerontologie en Geriatrie, Departement Maatschappelijke Gezondheidszorg en Eerstelijnszorg, KU Leuven, Mieke Deschodt

Introduction: Emergency department (ED) admissions of nursing home (NH) residents are common and often avoidable. The transmural care model SHIFT reduced ED admissions and enhanced quality of the transitional care process. This secondary analysis evaluated the impact of SHIFT on avoidable ED admissions and identified factors that could have presented transfers.

Methods: We included all ED admissions at UZ Leuven from six intervention and 14 control NHs during the intervention period. Two family medicine (FM) residents and two geriatric medicine (GM) residents assessed avoidability of each admission on a 4-point scale (definitely, possibly, possibly not, definitely not avoidable). Scores were discussed with a geriatrician and nurse until consensus was reached. Reasons for avoidability and preventable factors were analyzed separately by FM and the GM groups.

Results: Sixteen percent of ED admissions in the intervention group and 30% in the control group were considered 'definitely avoidable' ($p=0.189$). Lack of advanced care planning and the possibility of achieving similar benefits at a lower level of care were key reasons for ED avoidability. In both FM and GM groups, the top three factors to avoid transfers were: (1) geriatrician examination in the NH within 24 hours, (2) GP access to geriatric phone consultation, and (3) regular availability of a master-trained advanced nurse specialist in the NH.

Conclusion: The intervention showed a positive but non-significant effect. Preventing ED admissions remains multifactorial. Interdisciplinary consensus emphasized timely geriatric assessment, consultation, and advanced care planning to enable care at a lower level.

Advanced ADLs as Early Indicators of Decline in Robust Adults Aged 80+: A Longitudinal Analysis from the BUTTERFLY Study

Vrije Universiteit Brussel, Lisa Schwab

Introduction: Maintaining independence is central to well-being in adults aged 80+, yet little is known about how different levels of Activities of Daily Living (ADL), basic (b-ADL), instrumental (i-ADL), and advanced (a-ADL), change among robust older adults. This study examined 2-year ADL trajectories and identified baseline bio-psycho-social predictors of change to support early detection of vulnerability.

Methods: Data came from 400 community-dwelling adults (mean age 82.95 ± 2.73) participating in the BUTTERFLY study. ADL was assessed every 6 months using the Brussels Integrated ADL Inventory. Baseline predictors reflected ICF domains: body functions and structures, participation, environmental factors, and personal factors. Linear mixed-effects models with random intercepts and slopes estimated level-specific change and predictor associations.

Results: All ADL levels increased significantly in limitations over 2 years, with the steepest increases in a-ADL ($\beta = 0.72$, $p < .001$), followed by b-ADL ($\beta = 0.50$, $p < .001$) and i-ADL ($\beta = 0.34$, $p = .011$). Marked heterogeneity was observed across individuals. Higher cognitive functioning predicted better i- and a-ADL trajectories, while

resilience and female gender was associated with more favorable b- and a-ADL outcomes. Older age at baseline was consistently associated with lower ADL levels overall.

Conclusion: A-ADLs appear to decline first and may serve as early indicators of emerging vulnerability in robust adults aged 80+. A multidimensional ADL assessment, particularly including a-ADL, can support earlier identification of risk in primary care and guide personalized, preventive strategies to maintain independence.

What does self-management mean for frail older adults? Explorative baseline insights from the ActiveAge@Home study

Vrije Universiteit Brussel, Timothy Moreels

Introduction: Self-management support is increasingly recognized as a key strategy for helping older adults maintain autonomy and continue living independently at home. In the ActiveAge@Home study, we implemented an innovative home-based programme focused on meaningful activities of daily living (ADL) to strengthen autonomy among older adults meeting Fried's frailty criteria. To inform the design of effective interventions, we conducted a two-stage analysis to identify the factors that most strongly predict self-management in this population.

Methods: We conducted a cross-sectional analysis of baseline data encompassing health-related quality of life, ADL performance, cognitive function, loneliness, physical performance, and self-management. A two-stage analytic approach was used: first, univariate analyses identified variables significantly associated with self-management; subsequently, significant correlates were entered into a stepwise multivariate linear regression to construct a predictive model while controlling for collinearity.

Results: Participants (80% female; mean age 84 years, range 70–98) had an average self-management score (SMAS: mean 3.5; range 1.8–5), which showed significant univariate associations with all measures except physical performance (chair stand test and grip strength). Multivariate analysis yielded a two-factor model: loneliness and ADL performance, accounting for approximately 31% of the variance in self-management (Adjusted $R^2 = 0.308$, $p < 0.001$).

Conclusion: Interventions aiming to support frail older adults to maintain independence for as long, and as well, as possible, may require multidimensional interventions that integrate psychosocial components and daily-functioning strategies, rather than focusing solely on physical training.

Voorschrijfgedrag en continuïteit na ontslag van opioïden bij ouderen op traumatologie en geriatrie in UZ Leuven

Gerontologie en Geriatrie, Departement Maatschappelijke Gezondheidszorg en Eerstelijnszorg, KU Leuven, Marian Dejaeger

Achtergrond: Het gebruik van opioïden bij oudere patiënten krijgt steeds meer aandacht binnen de klinische praktijk. Hospitalisaties vormen vaak een kantelpunt waarbij opioïden gestart, aangepast of onderbroken worden. Er is beperkte kennis over verschillen in voorschrijfgedrag tussen ziekenhuisafdelingen en over de continuïteit bij ontslag.

Doel: Deze retrospectieve studie onderzoekt: 1) de huidige opioïdvoorschrijfpatronen, 2) verschillen tussen de afdelingen geriatrie en traumatologie, en 3) de continuïteit van opioïdgebruik bij ontslag.

Methode: Analyse van 250 opeenvolgende patiënten ≥ 75 jaar, opgenomen op afdeling geriatrie ($n=125$) of traumatologie ($n=125$) in UZ Leuven, die ≥ 3 dagen opioïden gebruikten tijdens hospitalisatie. Exclusie: uitsluitend subcutaan morfinegebruik in palliatieve context.

Resultaten: De gemiddelde leeftijd was 84,9 jaar; 70% vrouw. Op de afdeling traumatologie werd voornamelijk acute pijn behandeld, met tramadol als meest voorgeschreven opioïde. Op de afdeling geriatrie waren chronische of gemengde pijnklachten vaker de indicatie, met oxycodon of fentanyl als meest gebruikte opioïden. Laxativa en paracetamol/metamizol werden bij respectievelijk 80% en 99% van de patiënten voorgeschreven. Complicaties traden op bij 26%, voornamelijk delier (16%). Bij ontslag werd opioïdtherapie voortgezet bij 76% van de opioïdnaïeve patiënten, vaker op de afdeling traumatologie (59.4% geriatrie vs. 87.8% traumatologie; $p<0.000$); chronische pijn, vrouwelijk geslacht en afdeling waren in een univariate analyse geassocieerd met voortgezet gebruik.

Conclusie: Er bestaan duidelijke verschillen in voorschrijfgedrag van opioïden tussen de afdeling traumatologie en geriatrie. De bevindingen benadrukken het belang van gestructureerde aandacht voor het voorschrijven van opioïden tijdens hospitalisatie en bij ontslag om ongewenst chronisch gebruik te voorkomen.

Turning Heads to Identify Fall risk: Augmented-reality guided Head Movements Unravel Walking Instability in Aging

Universiteit Antwerpen, Eugénie Lambrecht

Introduction: Head movements are routinely used in functional activities, but can disturb sensory input, postural balance, and gait stability. Older adults show reduced head motion and age-related vestibular and somatosensory decline, making head movements a potential tool for stability deficits and fall-risk. This study assessed whether head movements perturb gait stability in older adults and if responses differ between those with and without lived fall experience.

Methods: Community-dwelling older adults ($n=62$), including those with ($n=27$) and without ($n=35$) ≥ 2 falls in the past 12 months, walked overground with augmented-reality guided pitch and yaw head movements. 3D-motion capture (Vicon) allowed calculation of: spatiotemporal parameters (walking speed, step length/time/width) and margins of stability (MoS), indicating the stability reserve.

Results: Older adult groups with and without falls were comparable ($p>0.05$, t-tests, Rstudio) in gender, age, and cognition (21 male/41 female; mean age 76.2 ± 6.6 years; MoCA 25.8 ± 2.5). Only frailty levels were higher ($p = 0.048$) in those with lived fall experience. Mixed-model analyses showed that head movements perturbed MoS in the older adults ($p<0.001$). Upward pitch elicited different MoS between those with and without falls ($p<0.05$), but downward pitch and yaw movements did not. Walking speed was lower in those with falls ($p=0.035$), while other spatiotemporal parameters were similar ($p>0.05$).

Conclusion: Head movements perturb gait stability in older adults. Upward pitch appeared sensitive for differentiating between older adults with and without falls. If accepted, this presentation will discuss applications of head movements in aging research and fall risk assessment in broader populations and comparisons with younger ages.

De meerwaarde van sociale verbondenheid tussen generaties. Inzichten uit een kwalitatief onderzoek in een intergenerationele ontmoetingsplek op een hogeschoolcampus

Arteveldehogeschool, Kathleen Willems

Inleiding: Intergenerationele initiatieven kunnen verbondenheid bevorderen en eenzaamheidsgevoelens verminderen. Als intergenerationele ontmoetingsplek op een hogeschoolcampus zorgt “De Rits” voor een laagdrempelige omgeving waar

senioren en studenten elkaar ontmoeten. De activiteiten brengen steeds studenten en senioren samen, vinden zowel binnen als buiten De Rits plaats en zijn gebaseerd op hun interesses en talenten. Dit onderzoek bekijkt hoe deze ontmoetingsplek bijdraagt aan betekenisvolle ervaringen en verbinding tussen senioren en studenten.

Methode: We voerden een kwalitatief onderzoek uit bij de bezoekers van “de Rits” middels semigestructureerde diepte-interviews. De analyse van de interviews gebeurde vanuit een interpretatieve benadering, waarbij werd nagegaan hoe De Rits bijdraagt aan betekenisvolle ervaringen en verbondenheid bij intergenerationele ontmoetingen. Ter validatie van de bevindingen vond een member-check plaats.

Resultaten: Uit interviews met senioren (n=5; gemiddelde leeftijd 70 jaar) en studenten (n=6; gemiddelde leeftijd 27 jaar) blijkt dat verbinding tussen jong en oud, gezelligheid en rust de kern vormen van de ervaringen. Bezoekers waarderen het laagdrempelige, open karakter en de mogelijkheid om deel te nemen aan diverse activiteiten. De Rits fungeert als ruimte voor stressontlading en mentale oplaadplek voor studenten, terwijl senioren het gevoel van welkom, betekenisvolheid, spontane interacties en eenzaamheidsreductie benadrukken. De verbinding tussen generaties wordt ervaren als complementair: studenten brengen energie en nieuwsgierigheid, ouderen bieden ervaring en steun.

Discussie en conclusie: De Rits is een betekenisvolle ontmoetingsplek waar senioren en studenten elkaar op een laagdrempelige manier ontmoeten. De Rits versterkt sociale verbondenheid en biedt rust en voldoening zowel voor studenten als senioren. Bovendien toont het concept potentieel als model voor intergenerationele ontmoetingsplekken binnen onderwijsinstellingen.

Equipping physicians for benzodiazepine receptor agonists deprescription in older adults: theory-based development of the BE-SAFE intervention

UCLouvain, Sibille François-Xavier

Background: Benzodiazepine receptor agonists (BZRA) continue to be widely used for sleep problems in older adults despite their unfavourable risk-benefit ratio. The hospital setting offers an opportunity to optimise medication use in older adults. The BE-SAFE project follows a rigorous, sequential approach to developing a theory-informed intervention aiming at initiating BZRA deprescribing in hospital settings in six European countries (Belgium, Greece, Norway, Poland, Spain, and Switzerland).

Objectives: The objectives are to describe the development of the physicians' intervention, present the results of on its acceptability and perceived feasibility among physicians, and outline the finalised BE-SAFE intervention.

Methods: The intervention followed four main steps: 1) selection of behaviour change techniques; 2) identification of existing resources and assessment of hospital physicians' needs and preferences; 3) development of intervention components and modes of delivery; and 4) end-user evaluation and refinement of intervention.

Results: A total of 11 behaviour change techniques were selected, addressing six main barriers into a six-component intervention: senior physician endorsement, training, self-monitoring, a deprescription algorithm, and communication strategies to patients and other healthcare professionals. These core elements were delivered with flexibility to allow local adaptability. Twenty-four physicians evaluated the intervention and confirmed that it effectively addressed the barriers identified in the preliminary work and suggested refinements related to clarity and time constraints.

Conclusions: A six-component, physician-focused intervention to support the initiation of BZRA deprescription in hospital settings was developed through a systematic, theory-informed approach addressing key implementation challenges. This intervention is currently evaluated in a multi-country cluster randomised controlled trial.

A multi-perspective take on adherence through the identification of adherence patterns in the ACTIVE-AGE@home intervention for frail older adults

Vrije Universiteit Brussel, Jade Tambeur

Background: Physical activity interventions can prevent frailty, but their effectiveness depends on adherence due to the dose-response relationship. Understanding how adherence unfolds is crucial to identify conditions that optimise engagement and health benefits.

Method: Adherence to ACTIVE-AGE@home, a home-based functional exercise programme for frail older adults tested in a three-arm RCT (volunteer-guided, professional-guided, control), was explored preliminary. Four adherence indicators were assessed according to Hawley-Hague et al.: attendance, duration adherence, intensity adherence, and retention.

Results: Eleven participants were included in the volunteer-guided group and 13 in the professional-guided group. Retention was 12 in the professional-guided group and 6 in the volunteer-guided group. Attendance averaged 80% (range 47%-99%) in the professional-guided group and 31% (range 0%-104%) in the volunteer-guided group. Duration adherence was 60% (range 36%-81%) versus 25% (range 0%-82%), and intensity adherence was 69% (range 40%-94%) versus 27% (range 0%-99%) for professional- and volunteer-guided groups, respectively.

Discussion: Findings should be interpreted cautiously due to self-report bias. Adherence patterns indicate which participants received the intended training dose and the extent to which they actively engaged with the programme. Average adherence rates favored the professional-guided group across all indicators. The observed differences highlight the need to examine underlying drivers, particularly continuity and simplicity, more evident in the professional-guided condition. Mixed-methods research can further clarify to inform strategies that strengthen adherence in challenging contexts.

A qualitative investigation of how adherence behaviors unfold within the ACTIVE-AGE@Home intervention

Vrije universiteit Brussel, Jade Tambreur

Introduction: Physical activity interventions can help prevent frailty, but their effectiveness depends on the dose–response relationship and therefore participants' adherence. Since adherence appears context-dependent, a deeper understanding of factors driving deviations in adherence among frail older adults is needed.

Method: A qualitative content analysis of trainer logbooks examined adherence in ACTIVE-AGE@home, a home-based functional exercise program for frail older adults tested in a three-arm randomized controlled trial (volunteer-guided, professional-guided, control). Documented reasons for deviations from the prescribed exercise regimen were categorized and quantified.

Results: Deviations from prescribed exercise dose ($n = 173$) were mainly linked to participants' medical or physical conditions ($n = 73$) and prolonged discussions exploring motivation or goals ($n = 61$); fewer stemmed from third-party interruptions ($n = 13$) or participants' emotional, psychological, or motivational states ($n = 9$). Session cancellations ($n = 312$) were mostly participant-induced ($n = 225$), primarily due to health status ($n = 191$), with practical ($n = 19$) or emotional, psychological, or motivational reasons ($n = 15$). Instructors reported mainly personal or practical reasons ($n = 76$); neutral factors (e.g., holidays) also occurred ($n = 11$).

Conclusion: Logbook data indicate multiple factors shaping adherence. Comparisons across training groups suggest underlying mechanisms influence participants' responses. Perceived burden appeared in the volunteer-guided arm, occurring with less streamlined sessions delivery. Further mixed-methods research is needed to clarify for whom, why, and in which circumstances adherence is present or compromised.

Improving ADL ability in frail older adults through exercise: Unravelling the underlying mechanisms. A meta-analysis

UAntwerpen, Emma De Keyser

Background: Frailty in older adults impairs Activities of Daily Living (ADL). While exercise interventions improve factors such as muscle strength and physical function, their direct impact on ADL ability remains unclear. This systematic review evaluates the effectiveness of exercise on ADL performance and explores potential mediating factors.

Methods: A systematic search in five databases included randomized controlled trials on frail adults (60+) comparing exercise to usual care, with ADL ability as an outcome. Risk of bias (ROB) was assessed. Meta-analyses used random effects models, with heterogeneity evaluated via the I^2 index. Mediators were explored by analysing effects on variables beyond ADL ability, categorizing them, and calculating the percentage of studies with significant within-between group effects.

Findings: Out of 5,975 records, 24 papers met criteria. Two had high ROB. Exercise improved ADL performance (SMD = 0.59) but showed high heterogeneity ($I^2 = 83\%$). Potential mediators of ADL improvements include cognition (100%), psychosocial factors (67%), function (100%), quality of life (83%), strength (67%), and balance confidence (100%), based on the proportion of studies reporting significant effects on both ADL performance and the respective mediator.

Discussion: Exercise improves ADL ability in frail older adults, but heterogeneity limits firm conclusions. Effective interventions should integrate physical, cognitive, and psychosocial components. Future research should use mediation analyses to clarify underlying mechanisms.

Effect of Resistance Training on Muscle Fat Infiltration (Myosteatosis) in Older Adults Aged 60 Years and Over: A Systematic Literature Review and Meta-analysis

Vrije Universiteit Brussel (VUB), Salman Khan

Introduction: Myosteatosis, defined as the infiltration of fat within skeletal muscle, is increasingly recognized as a contributor to impaired physical performance and greater vulnerability to functional decline in older adults. Resistance training (RT) has been suggested as a promising intervention to reduce intramuscular adipose tissue (IMAT), yet the consistency and magnitude of its effects remain unclear.

Methods: We conducted a systematic review and meta-analysis of randomized controlled trials investigating the impact of RT on IMAT in adults aged ≥ 60 years. PubMed, Scopus, and Web of Science were searched up to December 2024. PROSPERO 2025(CRD420250620553) . Eligible studies compared RT interventions with non-exercise or diet-only controls and quantified IMAT using MRI or CT. Two reviewers independently performed study selection, data extraction, and risk-of-bias assessment using the RoB 2 tool. Standardized mean differences (SMD) were pooled using a random-effects model.

Results: Seven studies met the inclusion criteria, and six ($n = 247$) were eligible for quantitative synthesis. Intervention durations ranged from 10 to 70 weeks, with considerable variation in RT intensity, frequency, and targeted muscle groups. RT produced a significant reduction in IMAT compared with control conditions (SMD = -0.52 , 95% CI $[-0.79, -0.24]$; $p = 0.0002$). The greatest improvements were observed in higher-intensity programs lasting at least 24 weeks. Statistical heterogeneity was low ($I^2 = 6\%$, $p = 0.38$), indicating consistent effects across studies and overall risk of bias was high.

Conclusion: RT may modestly reduce IMAT in older adults, particularly with longer and higher-intensity interventions. Large, well-designed trials with standardized protocols are needed to confirm these effects and establish optimal RT prescriptions for addressing myosteatosis in ageing populations.

Ultrasound-based muscle assessment in Belgian older adults: exploring the relevance of pennation angle in terms of muscle quality and physical activity

Universiteit Antwerpen, ZAS Middelheim, Emilie Mylemans

Introduction: Ultrasound is a promising, non-invasive method for early detection of muscle mass changes. However, age-dependent reference values are still lacking, hindering its widespread use in clinical practice. This study aims to validate muscle ultrasound in comparison with bioelectrical impedance analysis (BIA), a well-established technique, to support its integration into official guidelines for muscle screening. This specific topic focuses on pennation angle, as it shows considerable potential.

Methods: A total of 120 participants per age group (decade) will be recruited from ZAS Middelheim (University of Antwerp). Muscle ultrasound assesses thickness, cross-sectional area, echo-intensity and pennation angle. BIA, physical performance measures (gait speed, acceleration, SPPB), and validated questionnaires (FRAIL, SARC-F, MNA, MPI, CIRS) will also be collected.

Results: Preliminary data from 229 participants across all age groups shows that there is a significant decline in muscle mass and quality with age. In men, pennation angle declines from 14° in the 7th decade to a mere 6° in the 10th decade. In women, the same trend is observed with pennation angle decreasing from 12° in the 7th decade to 7° in the 10th decade. Pennation angle in our population ranged from 3° to 24° with a mean of 9°.

Conclusion: These preliminary findings highlight a possible role for pennation angle in evaluating muscle quality and thus assessing sarcopenia or identifying individuals at risk of sarcopenia. Ultrasound shows potential as a reliable bedside screening tool. This could lead to faster recognition and earlier intervention, reducing functional decline, morbidity and improving quality of life.

Ultrasound-based muscle assessment in Belgian older adults: Exploring the relationship between muscle quality and physical activity and working towards age-dependent reference values

Universiteit Antwerpen, ZAS Middelheim, Emilie Mylemans

Introduction: Ultrasound is a promising, non-invasive method for early detection of muscle mass changes. However, age-dependent reference values are still lacking, hindering its widespread use in clinical practice. This study aims to validate ultrasound muscle measurements by comparing them with bioelectrical impedance analysis (BIA), a well-established technique, to support its integration into official guidelines for muscle screening.

Methods: A total of 120 participants per age group (decade) will be recruited from the University of Antwerp and ZNA Middelheim. Muscle ultrasound will assess thickness, cross-sectional area, echo-intensity and pennation angle. BIA, physical performance measures (gait speed, acceleration, SPPB), phase angle, and validated questionnaires (FRAIL, SARC-F, MNA, MPI, CIRS) will also be collected.

Results: Preliminary data from 229 participants across all age groups and genders shows significant correlations between muscle thickness (PCC 0.506 women, 0.343 men), cross-sectional area (PCC 0.466; 0.347) and pennation angle (PCC 0.318; 0.325) with appendicular skeletal muscle mass. Ultrasound muscle parameters also correlate significantly with phase angle, physical performance such as gait speed, acceleration, hand grip strength and SPPB, and various clinical screening tools (FRAIL, SARC-F, MNA, MPI, CIRS).

Conclusion: These preliminary findings highlight ultrasound's potential as a reliable bedside screening tool for early sarcopenia detection. Defining age-dependent cut-off values could lead to faster recognition and earlier intervention, reducing

functional decline, morbidity and improving quality of life for older patients. The final results will provide valuable insights for incorporating ultrasound into routine clinical practice in geriatrics.

Preparing Future Physiotherapists for an Ageing Society: A Flemish Contribution within the European EdAge-physio Project

Vrije Universiteit Brussel, Karen Feyen

Research protocol background: As Europe's population ages, specialised physiotherapy for older adults is becoming increasingly necessary. The Erasmus+ EdAge-physio project (2026–2028) brings together five higher education institutions from Norway, Belgium, Iceland, the Netherlands and Portugal in a co-creative approach to strengthen the numbers of physiotherapists working with older adults across Europe. Within this European framework, the Vrije Universiteit Brussel addresses the persistent status of physiotherapy with older adults as a bottleneck profession in Flanders. This project is guided by the research question: which educational, motivational and societal factors influence physiotherapy students' and early-career professionals' readiness, attitudes and motivation to work with older adults?

Methods: A sequential mixed-methods design is applied. First, a scoping review synthesizes international evidence on factors influencing physiotherapy students' and early-career professionals' engagement on working with older adults. Second, focus groups with Flemish physiotherapy students and recent graduates explore educational experiences, perceived preparedness and barriers to working with older adults. Third, an online survey among Flemish physiotherapy students quantifies the relevance of identified factors. Fourth, a focus group with community-dwelling older adults incorporates end-user perspectives on expectations toward future physiotherapists.

Discussion: These findings inform the co-development of a flexible curriculum toolbox with modular learning resources, as well as a digital awareness campaign and local awareness days. By translating European insights into the Flemish context, this project addresses physiotherapy with older adults as a bottleneck profession by strengthening educational pathways, student motivation and workforce readiness, while fostering sustainable collaboration between education and healthcare.

Minder werkdruk door technologie? Een kwalitatieve analyse via participerende observaties

Arteveldehogeschool, Elise Cornelis

Introductie: Toenemende personeelstekorten vormen een kritieke uitdaging voor het waarborgen van kwaliteitsvolle, persoonsgerichte zorg, in het bijzonder binnen de zorg voor personen met dementie. Technologische innovaties worden vaak gepresenteerd als een oplossing om efficiëntie te verhogen en werkdruk te verlichten, maar er is onvoldoende inzicht in welke technologieën daadwerkelijk effectief en relevant zijn. Dit onderzoek beoogt knelpunten en verbeterkansen in werkprocessen van zorgverleners te identificeren en te verkennen hoe technologie kan bijdragen aan een optimale personeelsinzet, zonder afbreuk te doen aan de persoonsgerichte benadering.

Methode: Er werd een kwalitatief onderzoeksdesign toegepast met participerende observaties in thuiszorgorganisaties (n = 5) en woonzorgcentra (n = 7). De verzamelde data werden thematisch geanalyseerd en vertaald naar een gedetailleerde blauwdruk die werkprocessen visualiseert en uitdagingen, knelpunten en verbeterkansen blootlegt.

Resultaten: Uit meer dan 110 uur observaties blijkt dat – hoewel er vanuit elke organisatie een werk- en dagstructuur is – de werkprocessen weinig voorspelbaar zijn en voortdurend moeten worden aangepast aan de behoeften van personen met dementie. Gedragssuitingen zoals agitatie, claimend gedrag, repetitieve handelingen en verbale agressie vereisen aanzienlijke tijdsinvestering en flexibiliteit van zorgverleners. Daarnaast beïnvloeden diverse en inefficiënte communicatielijnen – waaronder miscommunicatie en gebrekkige informatieoverdracht – de continuïteit en kwaliteit van zorg negatief. Substantiële kansen werden geïdentificeerd voor automatisering van administratieve processen en repetitieve taken, wat kan bijdragen aan tijdswinst en een betere focus op directe zorg.

Discussie en conclusie: Deze bevindingen vormen een fundament voor strategieën om technologie doelgericht te integreren in kwaliteitsvolle dementiezorg, met behoud van een persoonsgerichte benadering. De resultaten benadrukken de noodzaak van technologische oplossingen die zowel micro- als macroniveaus van zorgprocessen optimaliseren en werkdruk verminderen.

Overzicht huidige praktijk geriatrische outreach

UZ Leuven, Lisa Dreessen

Inleiding: Geriatrische outreach, gedefinieerd als een bezoek van een geriater aan een woonzorgcentrumbewoner op vraag van de huisarts, kan bijdragen aan kwaliteitsvolle zorg in woonzorgcentra (WZC) en de samenwerking tussen ziekenhuis, huisartsen en eerste lijn versterken. In België ontbreekt echter een duidelijk overzicht van de huidige praktijk. Deze studie had tot doel deze werking in kaart te brengen.

Methode: Najaar 2025 werd een digitale vragenlijst verspreid naar diensthoofden geriatricie van alle Belgische ziekenhuizen. De vragen peilden naar de aanwezigheid en organisatie van outreach, doelstellingen, kernactiviteiten, ervaren samenwerking en het gebruik van de RIZIV-code 106772.

Resultaten: In totaal vulden 59 diensten de vragenlijst in; 41% (24/59) biedt outreach aan. Belangrijkste redenen voor het ontbreken ervan zijn tijdsgebrek (54%), lopende projectontwikkeling (46%) en personeelstekort (43%). De outreach richt zich vooral op WZC-bewoners (96%), met gemiddeld 8,2 uren per maand, vier bewoners per visite en samenwerking met zeven WZC. Specifieke adviesverlening (96%), medicatiereview (92%), ondersteuning bij vroegtijdige zorgplanning (88%) en geriatrische evaluatie (83%) vormen de kernactiviteiten. Slechts 17% ervaart de samenwerking met WZC en huisartsen als moeizaam. Hoewel 94% de RIZIV-code correct gebruikt, vindt 62% dat de criteria moeten worden uitgebreid, onder meer naar bredere aanvraagmogelijkheden, multidisciplinaire consultatie en structurele beleidsinput.

Besluit: Geriatrische outreach is in België aanwezig maar beperkt uitgebouwd. Diensten met outreach rapporteren duidelijke subjectieve meerwaarde voor patiënt, WZC en transmurale samenwerking. Tijds- en personeelstekort blijven belangrijke drempels. Structurele investering in geriatrische teams en uitbreiding van de RIZIV-criteria lijkt noodzakelijk voor verdere ontwikkeling.

#RoadTo2050 – welke technologie kan de zorgverleners van personen met dementie ondersteunen om haalbare en persoonsgerichte zorg te bieden? Een literatuurstudie

Arteveldehogeschool, Ruben Vanbosseghem

Introductie: De toenemende zorgvraag bij personen met dementie zet zowel thuiszorgdiensten als woonzorgcentra onder aanzienlijke druk. Huidige personeelstekorten en een groeiend pakket aan bijkomende taken, zoals administratieve verplichtingen, bemoeilijken het leveren van kwalitatieve dementiezorg in thuisverpleging

en woonzorgcentra. Tegelijkertijd evolueert technologie snel en kan dit zorgverleners ondersteunen, de werkdruk verlagen en persoonsgerichte zorg versterken. Toch ontbreekt vaak een duidelijk overzicht van welke technologieën beschikbaar, implementeerbaar en effectief zijn. Deze studie beoogt een systematisch inzicht te verschaffen in de bestaande wetenschappelijke literatuur rond optimale personeelsinzet en de rol van technologie in het bevorderen van efficiënte, mensgerichte dementiezorg.

Methode: Er werd een systematische literatuurstudie uitgevoerd. De databank PubMed werd hiertoe doorzocht. 339 artikels werden door drie onafhankelijke reviewers gescreend op titel en abstract, waarvan 72 artikels werden weerhouden. De literatuurstudie is ongoing. Momenteel zijn 10 artikels geïncludeerd op basis van full-text.

Resultaten: De voorlopige resultaten tonen uiteenlopende technologische innovaties die inspelen op de huidige zorguitdagingen en dit op drie niveaus. (1) Tot het niveau van de zorgorganisatie behoren toepassingen voor personeelsplanning en workforce management; (2) Op het niveau van individuele zorgverlening worden diverse hulpmiddelen in kaart gebracht, waaronder communicatietechnologie, robotica zoals medicatie- en sociale robots, sensortechnologie, domotica en artificiële intelligentie; (3) daarnaast blijken ook technologieën die direct door personen met dementie en hun mantelzorgers worden gebruikt, zoals GPS- en dwaaldetectiesystemen, relevant in het ondersteunen van autonomie en veiligheid.

Discussie en conclusie: De resultaten bieden een praktijkgericht overzicht in de bestaande technologie en duiden de mogelijkheden van die technologie op de verschillende niveaus.

De pennatiehoek als parameter voor spierkwaliteit: een literatuurstudie en echografische analyse

Geriatric ZAS, Lindsay Jongman

Inleiding: De pennatiehoek, de hoek tussen spiervezels en krachtgenererende as, is een parameter voor spierarchitectuur en spierkwaliteit. Een grotere pennatiehoek is doorgaans geassocieerd met een hoger krachtproducerend vermogen. Volgens de European Working Group on Sarcopenia in Older Persons is het bepalen van spierkwaliteit relevant voor de diagnose van sarcopenie, doch wat dit exact inhoudt is niet gedefinieerd. Dit onderzoek heeft tot doel (1) de beschikbare literatuur over de pennatiehoek in gezonde spieren te beschrijven en (2) de variatie van de pennatiehoek binnen één spier vast te stellen.

Methode: Via PubMed werd een literatuurzoekopdracht uitgevoerd. Daarnaast werden echografische beelden van de musculus rectus femoris verzameld bij bewoners van woonzorgcentra, familieleden en medewerkers. De pennatiehoek en variabiliteit hiervan werd vervolgens op deze beelden gemeten.

Resultaten: De literatuur toont dat de pennatiehoek beïnvloed wordt door factoren zoals gewrichtspositie, contractie, training, leeftijd (afname met de jaren) en geslacht (hogere waarden bij mannen). In de verworven echobeelden varieerde de gemiddelde pennatiehoek tussen 4,5° en 16,4° met een duidelijke link met leeftijd. Ook de variabiliteit verschilde, wat wijst op aanzienlijke intra-musculaire verschillen.

Besluit: Zowel de pennatiehoek als de variabiliteit van pennatiehoek binnen een patiënt kan een potentiële waardevolle parameter zijn voor het beoordelen van spierkwaliteit. De hypothese is dat grotere intra-musculaire variabiliteit kan wijzen op verminderde spierkwaliteit, onafhankelijk van leeftijd maar eerder gerelateerd aan functionele capaciteit. De pennatiehoek levert zo informatie die niet uit spiermassa of spierkracht alleen kan worden afgeleid. Verdere studies zijn nodig om deze hypothese te toetsen en deze meting te incorporeren in de diagnostiek rond sarcopenie.

Sarcopenia-defining parameters correlate with specific gut microbiota: preliminary findings from the TEMPUS-FUGIT study

KU Leuven, department of public health and primary care, division of Gerontology and Geriatrics, Laurence Lapauw

Background: This study aimed to clarify associations between sarcopenia(-defining parameters), gut microbiota, systemic and intestinal inflammation in community-dwelling persons ≥ 65 years.

Methods: This exploratory, cross-sectional study comprising TEMPUS-FUGIT (NCT05008770) data, included 144 persons, of whom 45 had any stage of sarcopenia as per EWGSOP2-criteria. Muscle mass and function were evaluated using ALM, HGS, CST, SPPB and gait speed. Gut microbiota taxa, enterotypes, diversity indices and fecal calprotectin were determined from fecal samples and systemic inflammatory markers IL-1 β , -4, -6, -8 and -10, TNF- α , IFN- γ and hs-CRP from serum. Following multiple-testing adjusted correlations, multivariate linear regression analyses were conducted correcting for age, sex, BMI, steps/day, medications, Bristol Stool Score, protein and fiber.

Results: Persons with the Prevotella compared to Ruminococcus enterotype, walked faster. hs-CRP was lower in persons with sarcopenia compared to healthy controls. In the entire cohort, a higher CST-time, and thus worse lower limb strength,

associated with lower presence of *Anaerosporebacter* (β : -0.107 [-0.199; -0.014]) and fCPT associated with *Streptococcus* (β : 0.307 [0.108; 0.506]), *Lactobacillus* (β : 0.766 [0.395; 1.137]) and *Slackia* (β : 0.465 [0.151; 0.780]). In persons with sarcopenia, HGS associated with *Mogibacterium* (β : 0.253 [0.062; 0.443]) and fecal calprotectin associated with *Acetitomaculum* (β : -0.993 [-1.837; -0.149]). All findings had a $p < 0.05$.

Conclusions: In persons with sarcopenia, the association between *Mogibacterium* and better HGS contradicts priorly reported positive association between frailty and *Mogibacteriaceae*. However, the association of higher *Acetitomaculum*, a producer of the health-beneficial metabolite acetate, and lower fecal calprotectin aligns with prior findings. This warrants further research in larger, longitudinal cohorts.

Towards a Conceptual Understanding of a Positive Living Environment for Residents in Nursing Homes

KU Leuven, Departement Maatschappelijke Gezondheidszorg en Eerstelijnszorg, Onderzoekseenheid Gerontologie en Geriatrie, Lien Janssens

Objective: Nursing homes provide permanent residence for older adults who can no longer live independently, emphasizing the importance of creating positive living environments for nursing home residents. Concepts like sense of home, quality of life, and person-centered care address parts of this, but none provide an overarching view of what a positive living environment entails. Therefore, this study aimed to clarify this concept and identify its key elements.

Methods: We combined scoping review with concept analysis to determine core characteristics (defining attributes), required conditions (antecedents), and outcomes (consequences). A search for qualitative studies published in the past 20 years retrieved 56 resident-perspective articles. Using purposive sampling, we ultimately analyzed 31 studies until reaching data saturation.

Results: Preserving identity emerged as the core of a positive living environment, embedded within seven interrelated defining attributes: continuity with life before the move, building and maintaining meaningful relationships, receiving personalized care, balancing autonomy and support, engaging in meaningful activities, feeling connected with the outside community, and balancing privacy and company. To enable these attributes, residents need acceptance and a positive mindset. Staff requires professional, emotional, and ethical competence, and organizations have to provide a functional yet homelike setting, have sufficient resources, and a culture that values personalized care and flexibility. Together, these elements dynamically interact, leading to consequences such as feeling at home, belonging, safety, dignity, and overall well-being.

Conclusion: A positive living environment is a continuous, co-created process involving residents, staff, families, and the broader organizational and social context, centered on identity preservation.

Can nutritional interventions affect the exercise induced response on inflammation and muscle damage in older persons? A systematic review and meta-analysis

Vrije Universiteit Brussel, Rubab Zahra

Introduction: This review evaluates the additional effect of nutritional interventions to exercise on biomarkers of inflammation and muscle damage in older adults above 65 years.

Methods: 30 studies were included through Pubmed, Embase and Web of Science. A random-effects meta-analysis was performed on inflammatory and muscle damage biomarkers, to compare the effect of exercise plus diet with exercise alone.

Results: Exercise interventions consisted of walking, resistance training, aerobic, combined, or multicomponent exercise, and duration varied from one single exercise session to 18 months. The nutritional interventions consisted of caloric restriction, protein supplementation, multi-nutrient protein based drinks, soy milk, omega-3 fatty acid rich healthy diet, omega-3 fatty acid supplementation, milk fat globule membrane supplementation, creatine supplementation, L-carnitine/leucine supplementation, fungus-derived exopolymer supplementation, and vitamin C, D, or E supplementation. Meta-analysis showed a reduction in circulating basal IL-6 compared to exercise alone for caloric restriction with aerobic or combined aerobic and resistance exercise (MD: -0.53 pg/ml; 95% CI: [-0.90, -0.16]). Omega-3 fatty acids in addition to resistance exercise did not reduce IL-6 (MD: -0.25 pg/ml; 95% CI: [-0.53, 0.03]) or TNF- α (MD: 0.07 pg/ml; 95% CI: [-0.45, 0.60]) compared to exercise alone. Muscle soreness decreased (MD: -0.50; 95% CI: [-0.67, -0.33]) upon protein supplementation during long-distance walking, compared to exercise only, while we did not find an effect on creatine kinase (MD: -87.2 U/L; 95% CI: [-274.3, 99.9]).

Conclusions: Caloric restriction in addition to aerobic or combined exercise reduced circulating IL-6 in older adults, compared to exercise alone. Protein supplementation reduced muscle soreness upon prolonged walking exercise.

Beautiful but distracting: how nature backgrounds undermine exercise quality in video-based and music-accompanied group exercise therapy for residents with moderate dementia

UHasselt, Maxine Claes

Purpose: Exercise adherence among nursing home residents with dementia is generally low. Small- group therapy, combined with music and exercise videos, may enhance participation. Building on this, we developed AMUSED, a video-based, music-accompanied group exercise therapy. This pilot study examined whether adding a nature background instead of a neutral background to the video affects adherence and motivation.

Method: Ten participants with moderate dementia participated in a cross-over study design, completing two identical sessions with each session using a different background (neutral vs beach with moving sea waves). Motivation was assessed through video analysis using the Observed Emotion Rating Scale (OERS) and the Intrinsic Motivation Inventory (IMI) questionnaire. Adherence of the exercise, both quantity and quality, was assessed using video analysis. Two raters independently analyzed the videos.

Results: Interrater reliability was almost perfect for adherence and most OERS subscales, except for pleasure. Motivation (OERS, IMI) did not differ between the background conditions (all $p > 0.05$). Adherence differed by background: exercise quality was higher in the neutral background (+9.5%, $p = .038$) and quantity also showing a non-significant trend toward higher scores in the neutral background (+5.5%, $p = .101$). Adherence also varied significantly across exercises, functional exercises performed best, and balance exercises showing the lowest adherence. There were no significant interactions between background and exercise category.

Conclusion: Adherence was higher in the neutral background, while motivation did not differ between backgrounds. These findings suggest that a neutral background may facilitate exercise adherence better in residents with moderate dementia during a video-based, music-accompanied group exercise therapy.

Older adults risk classification for anticholinergics: orca – a Delphi panel-validated scale

UZ Gent, Ine Simal

Background: Drugs with anticholinergic properties (DAP) are widely prescribed in older adults for various medical conditions. However, their cumulative anticholinergic

burden is associated with adverse outcomes, including cognitive decline, falls and hospitalisations. Anticholinergic scales vary significantly, complicating their interpretation and application into clinical practice and research. Recent systematic reviews provide an overview of existing scales, however often lack the clinical perspective of healthcare professionals. To address this gap, we developed the older adult risk classification for anticholinergics (ORCA) scale, incorporating both evidence and expert clinical judgement.

Methods: A preliminary drug list was derived from the most comprehensive systematic review. A two-round Delphi process was conducted with 14 clinicians from nine European countries with substantial expertise in geriatric medicines and clinical pharmacology. Each round consisted of two phases in which experts rated the anticholinergic burden of drugs using a four-point Likert scale. Additional drugs and anticholinergic burden scales could be proposed at any point. Consensus was defined using the Lynn method.

Results: A total of 233 drugs were assessed. Experts classified 17 drugs as having no anticholinergic properties, 115 as low, 31 as moderate and 65 as high burden. The majority of included DAP were central nervous system drugs, particularly antipsychotics and antidepressants. Five drugs did not reach consensus.

Conclusion: The ORCA scale is a clinically informed, evidence-based classification of DAP tailored for older adults. It offers a standardised tool to support clinicians, pharmacists and researchers in assessing anticholinergic burden, enhancing prescribing safety and guiding therapeutic decision-making in this vulnerable population.

Silverconnect: Transmural collaboration and AI in elderly care: results from a multicenter study

AZ Zeno, Stéphanie De Clerck

In 2024–2025, a Belgian consortium responded to a government call to test innovative digital tools in clinical practice. Partners included AZ Zeno Knokke-Heist, AZ Oostende, AZ Maria-Middelares Gent, nine nursing homes (NHs), and a technology provider (Bingli). Together, they developed an AI tool to assist nurses in NHs in analysing acute changes in residents' health status. This retrospective, multicentric study aimed to determine whether AI can optimise communication and clinical reasoning by nurses and support decision-making by general practitioners (GPs) in a frail elderly population. AI-generated differential diagnoses supported medical decisions on treatment in the NH, hospital referral, or geriatric consultation.

The methodology comprised AI tool development, analysis of current NH workflows, pre-pilot testing, mapping digital partners, and stakeholder training and engagement.

Key achievements included strengthening transmural collaboration, structuring healthcare data transfer via E-health Box and COZO, supporting clinical reasoning, and generating lessons for future innovation in elderly care. Limitations involved the absence of baseline data, insufficient capacity of Bayesian AI to address complex geriatric problems, limited adaptation time, opportunities to strengthen GP engagement and regulatory constraints.

Findings highlight the need for flexible AI tools and baseline indicators when implementing AI in complex residential elderly care, as well as the value of cooperative learning in a transmural healthcare setting.

A Systematic Review on the Cognitive and Emotional Processes of Regret and their impact on Emotional Wellbeing in Older Adults

VUB, Ellen Gorus

Introduction: Regret is a multifaceted cognitive and affective emotion that emerges when reflecting on unattained goals or alternative life choices and is particularly salient in older adulthood. Persistent regret can adversely affect emotional wellbeing, yet adaptive emotion regulation may foster resilience in later life.

Methods: A systematic review was conducted following PRISMA guidelines, using a search key with terms for older adults, regret, emotion regulation, rumination, cognitive processes, and wellbeing.

Results: Twelve articles describing 13 studies were included (five in Europe, five in the United States, three in Canada; total participants = 5,924). Most studies ($n = 11$) were quantitative descriptive, with one qualitative and one mixed-methods design. Regret was measured using validated scales ($n = 6$), single-item measures ($n = 3$), and qualitative/narrative approaches ($n = 3$). High emotional intensity of regret was linked to increased depressive symptoms and reduced wellbeing ($n = 8$), while maladaptive cognitive responses intensified regret ($n = 6$). Adaptive emotion regulation strategies, including acceptance and disengagement, supported better outcomes ($n = 4$). Unresolved regret predicted poorer life satisfaction and physical health ($n = 9$).

Conclusion: In later life, regret is closely linked to emotional wellbeing, as it is shaped by the interplay of cognitive and emotional processes, with emotion regulation playing a key role in psychological adjustment. Future research should employ standardised instruments, longitudinal designs, and consider diversity in regret

types and personality. These findings highlight the importance of integrated interventions targeting cognitive-emotional mechanisms to promote wellbeing in older adults.

Cognitive Control and Stress Regulation in Older Adults: A Systematic Review

Vrije Universiteit Brussel, Tricia Florence

Introduction: The effects of stress on cognitive ageing and cognitive control are well-researched. While this is well explored in younger adults with several theoretical models, directional effects of cognitive control on stress is less explored, especially in older adults. This relationship is important in our ever-aging world since cognitive control functions are the most sensitive to ageing processes and intricately tied to how one manages life's challenges.

Methods: A systematic review was conducted of original quantitative research studies examining the impact of cognitive control on long-term stress perception in older adults obtained from PubMed, Pubpsych, and Web of Science. Inclusion criteria concerned the shifting, inhibition, and updating domains of cognitive control in healthy, community-dwelling older participants (mean age 60 and above) and the relationships to long-term stress. Risk of bias was assessed with The Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies.

Results: Sixteen studies with 60-3157 participants aged 50-105 years were included in our narrative analysis. Many studies (n=8) linked worse cognitive control at least one domain with higher subjective stress. However, several studies (n=11) also showed no significant relations in at least one domain. No directional relationship could be determined since exclusively cross-sectional data could be extracted.

Conclusion: Especially in high-quality studies, a connection between worse cognitive control and higher stress emerged. Potential underpowering and white North Americans constituting most participants limit generalizability. Directional longitudinal research in older adults is highly recommended for cognitive interventions and operationalization of cognitive control and stress effects.

The influence of Microbiome Alterations on Immunosenescence: A systematic review

Vrije University Brussel, Clementine Aleambe

This review evaluates the effectiveness of probiotic interventions in older adults, focusing on their ability to modulate gut microbiota composition, enhance immune function, and reduce chronic low-grade inflammation (inflammaging) and key biomarkers linked to immunosenescence. Methods: Following PRISMA guidelines (registered in PROSPERO), a systematic search of PubMed, Web of Science, and Embase identified studies examining the effects of probiotics or synbiotics on the aging gut microbiome and its relation to immunosenescence. Participant and intervention characteristics and outcomes related to gut microbiota, immune function, and inflammation were extracted. Results: 11 articles were selected, 9 randomized controlled trials and 2 non-randomized controlled trials. A high heterogeneity was observed regarding the intervention, methods for evaluating biomarkers of inflammation, biomarkers of immunity, and gut diversity and composition, as well as the outcome, which also varied. Studies reported improved immune function, increased phagocytic activities of neutrophils and monocytes, and stabilized natural killer cell activity. While studies using inflammatory biomarkers showed a significant change in the intervention group with synbiotic supplementation, as C-reactive protein and interleukin-6 levels decreased significantly. However, in most studies, the values returned to baseline after discontinuation of probiotics.

Conclusion: This review revealed that probiotics modulate the gut microbiome composition and can reduce chronic low-grade inflammation.

Renin-angiotensin-aldosterone system inhibitors preserve blood pressure lowering efficacy across the adult lifespan: a systematic review and meta-analysis

UZ Brussel, Jordy Saren

Background: Renin-angiotensin-aldosterone system (RAAS) inhibitors are widely used for blood pressure (BP) management. Age-related physiological changes, including reduced renin activity and increased arterial stiffness, raise concerns that their BP-lowering effectiveness may decline in older adults.

Aim: To systematically determine whether chronological age modifies the BP response to RAAS inhibitors.

Methods: Fourteen studies (8 randomized, 1 non-randomized, 5 observational) were identified through systematic screening of PubMed and Web of Science. Risk of bias was independently assessed by two blinded reviewers. Meta-analyses using Review Manager version 5.4 compared BP-lowering efficacy of RAAS inhibitors between younger and older adults.

Results: A total of 42,233 participants were included, with mean ages ranging from 51.8 to 74.8 years. The meta-analyses revealed that systolic BP reduction did not differ significantly by age (<65 vs ≥65 years: MD=0.35, [95% CI: -0.63; 1.33]; 65–74 vs 75–84 years: MD=-0.15 [95% CI: -1.57; 1.27]; <70 vs ≥70 years: MD=1.90 [95% CI: -0.15; 3.95]; <75 vs ≥75 years: MD=-0.16 [95% CI: -4.16; 3.83]; all $p>0.05$). Diastolic BP reduction was also similar across age groups (<65 vs ≥65 years: MD=-0.38 [95% CI: -1.07; 0.31]; 65–74 vs 75–84 years: MD=-1.09 [95% CI: -2.40; 0.23]; <70 vs ≥70 years: MD=-0.60 [95% CI: -1.21; 0.02]; all $p>0.05$).

Conclusion: The BP-lowering efficacy of RAAS inhibitors is consistent across adult age groups, indicating these agents remain effective in older adults despite age-related physiological changes. Findings support continued use of RAAS inhibitors for hypertension management across the adult lifespan.

Vaccination in the elderly: current recommendations and strategies for improvement

KU Leuven, Lotte Dieltjens

Introduction: The global population is aging. Infectious diseases are an important cause of increasing mortality, morbidity and frailty in the elderly population. Immunosenescence and inflammaging contribute to reduced immune response to vaccination and increased vulnerability to infections. Although vaccination remains a cornerstone to infection prevention, vaccine coverage in the elderly population remains suboptimal. This underscores the need for strategies that enhance both vaccine uptake and immunogenicity.

Methodology: A narrative, non-systematic literature review was conducted using the MEDLINE database. Scientific reports from the Belgian Superior Health Council on adult vaccination recommendations were included, alongside additional relevant publications identified through reference screening.

Results: This review summarizes the current vaccination landscape for older adults in Belgium, focusing on influenza, herpes zoster, pneumococcal disease, COVID-19, respiratory syncytial virus (RSV), and diphtheria-tetanus-pertussis (DTP). Recent advances are highlighted, particularly since a lot of the currently used vaccines are less immunogenic and effective in the elderly. Potential strategies to

improve immunogenicity are discussed: higher antigen dose, adjuvants, recombinant subunit and protein conjugated vaccines, newly developed mRNA vaccines and booster dosing. A significant evidence gap persists because older and frail adults are frequently underrepresented in vaccine efficacy trials. Beyond vaccine development, improving awareness and addressing barriers remain essential to enhance vaccination uptake.

Conclusion: This review underscores the ongoing need for robust research and tailored vaccination strategies to better protect vulnerable older adults.

Stretching an control for studies on exercise immunology of oxidative stress markers: A systematic review

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Purpose: Physical exercise can attenuate age-related chronic low-grade inflammation and reduce oxidative stress. Active muscle contraction is assumed to be essential in the anti-inflammatory effect of exercise. Muscle stretching does not involve active contractions and has therefore been used as an active control in exercise immunology studies. However, its potential influence on inflammatory and oxidative stress markers of the immune system has not been objectively evaluated. This systematic review aimed to assess whether muscle stretching constitutes an appropriate control condition in exercise immunology research.

Methods: A systematic literature search was conducted in PubMed and Web of Science, identifying randomized controlled trials investigating the effects of muscle stretching on inflammatory and oxidative immune markers in adults aged ≥ 65 years (PROSPERO CRD42023388920). Reviews, case reports, and animal studies were excluded. Methodological quality was assessed using the Cochrane Risk of Bias 2 tool.

Results: Nine randomized controlled trials of sufficient methodological quality were included, all examining effects on basal levels of oxidative stress markers. Most markers (including SOD, NO, VCAM, ICAM, PTX3, ox-LDL, MDA, HNE, nitrotyrosine, and protein carbonyls) were unaffected. However, LPO increased, while CAT, ROS, fibrinogen, and MDA-LDL decreased in older adults with chronic disease, such as peripheral artery disease.

Conclusion: Our review indicates that the effects of muscle stretching on oxidative stress markers may depend on health status. Stretching can serve as an active control in healthy older adults to account for non-exercise confounders such as social interaction. However, caution is warranted when extrapolating these findings to populations with specific disease characteristics.

Health and care experiences of older adults affected by suicide: a qualitative exploration

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Introduction: older adults have the highest suicide rates of all age groups in Flanders. Previous studies found older adults had contact with health/care professionals in the period before the suicide (attempt). This presents an opportunity for prevention, however, the nature of these contacts are not yet understood. We therefore zoom in on how older adults experience care and support received in the period preceding suicide (attempts).

Methods: we conducted two types of qualitative interviews, interviews with older adults with experience of suicidal thoughts or attempts after age 60, analysed through Interpretative Phenomenological Analysis and interviews with relatives of a person aged 60 and over who died by suicide, analysed thematically. This is part of a larger qualitative study into the suicidal process.

Results: most older adults had been in contact with health/care professionals in the period before their suicide (attempt). Requests for support were frequently not directly related to the suicidal crisis. Instead, older adults asked for help for seemingly unrelated physical health issues. Some were left feeling disillusioned with the received support, which enhanced their feelings of hopelessness about recovery and ultimately contributed to their suicidal process. Others noted how empathy, holistic and appropriate care helped them carry the burden of their suicidal thoughts.

Conclusion: suicidal older adults often contact health/care providers for support, both related and unrelated to their suicidal thoughts. Insights into these contacts help us understand how care can support and hinder recovery, and what aspects of the support interaction are important in this.

Role of Peptides in Sarcopenia: A Scoping Review

TRIGG - Ghent University, Anton De Spiegeleer

Introduction: Sarcopenia is common in ageing and disease and is strongly associated with adverse outcomes. Peptides have recently gained attention for their biological activity, emerging as potential biomarkers and therapeutic targets.

Methods: This scoping review examined studies reporting direct associations between defined peptides and clinical components of sarcopenia: muscle mass, strength, and physical performance. Embase, PubMed, and Web of Science

were searched up to October 2024. Mechanistic pathways were synthesized using evidence from peptide-muscle studies.

Results: A total of 126 studies were included. Seventy-one studies (56.3%) examined a single sarcopenia component (48 mass, 16 strength, 7 performance), 31 (24.6%) assessed two components, 16 (12.7%) evaluated all three separately, and 8 (6.3%) used a composite outcome. Eighty-seven distinct peptides were identified, ranging from collagen tripeptide to insulin. The most frequently studied peptides were ghrelin (14.3%), brain natriuretic peptide (11.1%), C-peptide (11.1%), insulin (10.3%), and SS-31 (6.3%). Most peptides (64.3%) modulated key muscle homeostasis pathways, including MAPK/ERK, PI3K/Akt/mTOR, ActR/SMAD, and IKK/NF- κ B, which regulate transcriptional drivers of muscle atrophy and hypertrophy. Study design and reporting limitations were common. Females were underrepresented, comprising 23.9% of participants in human interventional studies and 9.1% and 12.4% of mice and rats in rodent studies. Reporting of pre-analytical and analytical factors was inconsistent, e.g. only 56.6% of studies reported diurnal timing, dietary intake, and physical activity at the time of peptide sampling, and just 11.5% specified limits of detection for peptide assays.

Conclusions: Peptides represent promising therapeutic targets for sarcopenia. Improved population representation and standardized reporting are essential to advance peptide-based interventions.

Ergotherapie als sleutel tot langer zelfstandig thuis wonen: impact op micro-, meso- en macro-niveau

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Inleiding: Ergotherapie speelt een cruciale rol in het ondersteunen van fysiek kwetsbare oudere personen om veilig en zelfstandig in hun vertrouwde omgeving te blijven wonen. Hoewel deze wens breed gedeeld wordt, vormt het naleven van ergotherapeutische aanbevelingen – essentieel voor het behoud van zelfstandigheid en veiligheid – een aanzienlijke uitdaging.

Methode: Deze presentatie koppelt praktijkvoorbeelden uit de klinische setting aan nationaal en internationaal wetenschappelijk bewijs. De standaard ergotherapeutische interventie werd onderbouwd met recente inzichten uit een meta-analyse en twee kwalitatieve studies uitgevoerd in Vlaanderen. Deze studies maakten gebruik van methodologische kaders die zijn geïntegreerd in een 6-stappen behandelingsprotocol. Door methodische triangulatie werden de componenten geïdentificeerd die therapietrouw bevorderen. Tevens werd een evidence-based klinische richtlijn ontwikkeld met concrete aanbevelingen voor ergotherapeuten.

Resultaten: Het 6-stappen ergotherapeutisch protocol bevat evidence-based elementen die essentieel zijn voor een effectieve ergotherapeutische interventie. De nadruk ligt op onder meer op betekenisvolle activiteiten, versterking van gezondheidsvaardigheden en interprofessionele samenwerking. Daarnaast worden barrières voor therapietrouw aangepakt via strategieën zoals gedeelde besluitvorming, het stellen van persoonlijke doelen, de therapeutic-use-of-self, en procesmatige componenten zoals tijdige inzet van interventies en systematische monitoring.

Conclusie: Door wetenschappelijk bewijs te integreren en interventies af te stemmen op contextuele behoeften, kan therapietrouw aanzienlijk worden verhoogd, wat de effectiviteit van ergotherapeutische interventies versterkt. Dit levert voordelen op voor de oudere persoon, diens directe omgeving, zorgprofessionals én de samenleving.

How do residents with suicidality or depression experience life in nursing homes? A qualitative systematic review

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Introduction: Suicidality and depression are strongly linked in older age. In nursing homes (NHs), the prevalence of depression is known to be very high. However, reports on suicidality are scarce, with even less research centering residents' perspectives. We conducted a qualitative systematic review to examine the lived experiences of NH residents with suicidality and/or depression and further explore life aspects possibly pertinent to this phenomenon in this setting.

Methods: We searched PubMed, PsycInfo, Scopus, Web of Science for qualitative and mixed-methods studies investigating experiences of NH residents with suicidality/depression. CASP Qualitative Studies Checklist served to assess risk of bias, with the overall quality of included studies being acceptable/good. Articles were narratively synthesized.

Results: Eleven studies revealed five domains encapsulating residents' experiences: intrapersonal, interpersonal, institutional, existential, and coping. Residents expressed loneliness, isolation, and loss of independence in unfamiliar, rule-bound environments, where decline and death seem central and inescapable. Meaninglessness and low self-worth pervaded residents' perceptions, accentuating a feeling of irreversible loss and disconnection from the world. Yet, they appreciated the care and assistance inherently provided by the facilities. Despite frequently articulating wishes to die or their suffering, residents also described ways of enduring.

Conclusion: Residents highlighted diminished self-worth, meaning, autonomy, and hope – aspects possibly accentuated in NHs featuring omnipresent care and

supervision amidst unfamiliar, vulnerable co-inhabitants. Further investigation into institutional factors and absent interventions is needed. Our review provides an opportunity to hear residents' voices behind suicide/depression statistics and capture their whole experience beyond only that of their mental health.